QUARTERLY PERISCOPE.

FOREIGN INTELLIGENCE.

SPECIAL ANATOMY.

1. *Malformation of the Heart.*—Professor Holst, in a recent number of *Hufeland's Journal*, (*Jan.* 1837,) records a remarkable example of this which he met with in a child who enjoyed perfectly good health until she was two years old, when her skin began to become blue, especially at the parts most distant from the heart. She then experienced feelings of suffocation, giddiness, and spasms. These attacks were usually followed by sleep, after which the blueness of the skin was less. Violent palpitations of the heart, with difficulty of breathing, coldness, and frequent hæmorrhage from the nose, gradually succeeded; and though their frequency diminished, yet their violence and duration gradually increased. During the paroxysms, the left side became colder than the right, and the pulsations of the arteries at the wrist of the left arm could not be felt. She died suffocated in one of these paroxysms.

The following were the chief results of the *post-mortem* examination:

The heart was very large, and its right side was larger than its left. There was a communication between the two auricles, not only by the foramen ovale, which remained open, but also by an abnormal opening. The aorta and the pulmonary artery arose from the right ventricle. These arteries and all the others were smaller than natural. The lungs were remarkably small, and the thymus gland was unusually enlarged.

From the above arrangement of parts, it follows that there must have been a mixture of the venous and the arterial blood. As, therefore, the blood received by the lungs was partly venous and partly arterial, and the calibre of the pulmonary artery was small, the imperfect developement of the lungs is accounted for. The large size of the veins and the venous nature of the blood depended on the double communication between the cavities of the heart and on the mixture of the two kinds of blood. The large size of the thymus gland is curious; for its enlargement is always found to accompany the permanent openness of the foramen ovale.

The left subclavian artery arose from the upper angle of a triangular sac, into the two other corners of which opened the left vertebral artery and an abnormal canal, occupying probably the place of the passage of the foramen ovale. By this last the subclavian artery was in communication with the left branch of the pulmonary, but as this canal was very small but little blood could enter into the subclavian artery. It seems to have received most of its blood from the left vertebral; so that the blood, in getting from the aorta to the left subclavian, must have passed through the carotids and the circle of Willis. This descending

current would meet the opposite one coming through the abnormal canal, and the resistance between the two columns probably caused the triangular dilatation above alluded to. It accounts for the difficulty in the blood's reaching the left brachial artery, and for the cessation of the beating of the pulse and of the diminished temperature of the left arm.

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2. *Preservation of dead bodies for dissection.*—The Academy of Sciences of France, has awarded a prize of 800 francs to M. GANNAL, for his method of preserving bodies for dissection. The process consists simply in injecting an aqueous solution of an aluminous salt by one of the carotids: some pints are sufficient; after it the body may be preserved exposed to the air for a long time without putrefaction, and sometimes at last dries, and is mummified. He uses acetate of alum, prepared from the acetate of lead and sulphate of alum and potash; and five or six pints, of a strength that will mark 18° on Beaume's areometer, (equal to a specific gravity of about 1·140,) are sufficient to preserve a body for five or six months.

He has also used simple sulphate of alum for procuring the acetate. With one kilogramme of common sulphate of alum, in lumps, 250 grains of acetate of lead, and two pints of water, a mixture may be obtained sufficient to preserve a body four months; or common sulphate of alum alone will make one keep for two months.

The Commission has reported not only according to what it had itself seen, but has taken the opinion of persons better practised in such things than themselves; and the answer was unanimous, that by the proceeding above mentioned, bodies may be preserved, without smelling, for a month, six weeks, or more, according to their previous condition, the state of the atmosphere, &c.; and that consequently this is a discovery of considerable importance to those engaged in dissecting, removing entirely all that is disagreeable in that study, and all that is perhaps insalubrious, and enabling them to prolong with safety their dissections of the more minute parts.—*London Med. Gaz., Sept.* 1837.

GENERAL ANATOMY AND PHYSIOLOGY.

3. *Existence of Germs in the Fœtus.*—M. CARUS communicated to the Royal Academy of Sciences of France, at their session on the 7th of August last, the results of his investigations for the determination of the period at which the ova may first be found in the ovaries of mammalia in general, and of the human species in particular.

He has especially examined the ovaries of newly-born calves; and he has advantageously employed with his microscope the *compressorium* of Valentin and Wagner.

In the calf, immediately after birth, he has succeeded not only in extracting completely the whole Graafian vesicle, but also, by tearing this cautiously asunder under the microscope, he has found the little ovum itself swimming in the discus proligerus, in the midst of the granular liquid which the vesicle contains. The little ovum thus demonstrated, shows very distinctly the chorion, the yelk, and the primary vesicle with its germinal spot, just like (except as regards size) the ovum removed from the vesicle of the cow.

Last spring the author extended his observations to the human species. He could not discover the Graafian vesicle with the liquid surrounding the ovum in the ovary of a female infant, which died four hours after birth; but by cutting thin slices of the ovary, and slightly pressing them beneath the microscope, ova were very distinctly seen, perfectly indicated by the vitellus and the primary vesicle, and still closely enveloped by the substance of the Graafian vesicle and the ovary.

It was quite different with the ovary of a female child, eighteen months old. Here several vesicles of a quarter or even half a line in diameter were seen; and though the child had suffered from rickets, and there was sanguineous infiltration of the uterus and the ovary, and even a little blood had penetrated into the liquid of some of the vesicles, and had dissolved the little ovum, yet in one of the largest it was found distinctly formed, while others presented only the whitish circle of